REMARKS

Reexamination and reconsideration of the application as amend are respectfully requested. Claim 36 has been amended to emphasize the nature of the hot wire cutting of the filtration media array to emphasize its novel features in the context of the present invention. The hot wire cutting is used in a manner not so as to primarily cut a material, but rather to fuse adjacent layers of the filtration media array, which are not previously joined, in a manner that forms a dimensionally stable filter while also not melting the respective layers so much as to completely obstruct the openings of the filtration media array. This is discussed, for example, at page 16, lines 6-14 and at page 12, lines 12-24. The filter media array is therefore unbonded prior to hot wire cutting.

This is a method that is neither taught nor suggested in the prior art of record. It is submitted that it would not have been obvious to one of ordinary skill to use the method in Hurd to fuse respective unbonded layers of a three-dimensional filtration media array together to form a dimensionally stable filter. Hot wire cutting as discussed in Hurd is simply and solely a method of cutting. In specifically a method of cutting polystyrene foam honeycomb structure, not a film layer.

The problem with cutting polymeric film layers at a temperature sufficient to melt the film material is that the melted polymer would tend to smear and preclude the openings formed by the structured film layers. Hurd is neither faced with this problem nor suggests a solution to this problem. Further, Hurd is not properly combinable with Insley in that Insley does not teach or suggest hot wire cutting would be a desirable method of bonding respective film layers together. Insley teaches that separate bonding must be performed in order to bond the layers together if this is desired. If hot wire cutting was a desirable method to bond the layers together, it was certain that Insley would have disclosed such. Instead, Insley teaches separately bonding and then subsequent slicing. This is an extremely complicated and problematic method of forming a three-dimensional filter. The use of hot wire cutting to simultaneous cut and bond the respective layers together is extremely desirable and is a substantial improvement over the methods disclosed in Insley and provides an unexpected result neither taught nor appreciated in the art as a whole. The Examiner's use of Hurd to suggest that he would provide a quick and

simple method of fusing filtration media, such as disclosed in Insley, relies upon the Applicants' disclosure and is impermissible hindsight. Further, the Hurd reference does not teach hot wire cutting controlled in a manner where the cutting rate prevents occlusion of the openings of the filtration media array.

In view of the above, it is submitted that the application is in condition for immediate allowance and such is respectfully requested.

Respectfully submitted,

October 24, 2003
Date

By: _____
William J. Bond, Reg. No.: 32,400
Telephone No.: (651) 736-4790

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833